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CLAIMS

What is claimed is:

1. A system for treating wastewater, comprising:
 - a first collection tank for receiving a first wastewater;
 - a second collection tank for receiving a second wastewater;
 - a reaction tank provided in fluid communication with said first collection tank and said second collection tank for receiving and sedimenting particles from the first wastewater and the second wastewater; and
 - at least one clarifier provided in fluid communication with said reaction tank for separating the particles from the first wastewater and the second wastewater.
2. The system of claim 1 further comprising a holding tank provided in fluid communication with said first collection tank, said second collection tank and said reaction tank for receiving the first wastewater and the second wastewater from said first collection tank and said second collection tank, respectively, and distributing the first wastewater and the second wastewater to said reaction tank.

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3. The system of claim 1 further comprising an effluent collection tank provided in fluid communication with said at least one clarifier for receiving wastewater effluent from said at least one clarifier.

4. The system of claim 3 further comprising a holding tank provided in fluid communication with said first collection tank, said second collection tank and said reaction tank for receiving the first wastewater and the second wastewater from said first collection tank and said second collection tank, respectively, and distributing the first wastewater and the second wastewater to said reaction tank.

5. The system of claim 1 further comprising a third collection tank for receiving a third wastewater and wherein said reaction tank is provided in fluid communication with said third reaction tank for receiving the third wastewater.

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6. The system of claim 5 further comprising a holding tank provided in fluid communication with said first collection tank, said second collection tank and said reaction tank for receiving the first wastewater and the second wastewater from said first collection tank and said second collection tank, respectively, and distributing the first wastewater and the second wastewater to said reaction tank.

7. The system of claim 5 further comprising an effluent collection tank provided in fluid communication with said at least one clarifier for receiving wastewater effluent from said at least one clarifier.

8. The system of claim 7 further comprising a holding tank provided in fluid communication with said first collection tank, said second collection tank and said reaction tank for receiving the first wastewater and the second wastewater from said first collection tank and said second collection tank, respectively, and distributing the first wastewater and the second wastewater to said reaction tank.

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9. A system for treating wastewater, comprising:

- a first collection tank for receiving a first wastewater;
- a second collection tank for receiving a second wastewater;
- a reaction tank provided in fluid communication with said first collection tank and said second collection tank for receiving and sedimenting particles from the first wastewater and the second wastewater;
- at least one clarifier provided in fluid communication with said reaction tank for separating the particles from the first wastewater and the second wastewater; and
- a storage tank provided in fluid communication with said at least one clarifier for receiving wastewater effluent from said at least one clarifier.

10. The system of claim 9 further comprising a holding tank provided in fluid communication with said first collection tank, said second collection tank and said reaction tank for receiving the first wastewater and the second wastewater from said first collection tank and said second collection tank, respectively, and distributing the first wastewater and the second wastewater to said reaction tank.

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11. The system of claim 9 further comprising an effluent collection tank provided in fluid communication with said at least one clarifier for receiving wastewater effluent from said at least one clarifier, and wherein said storage tank is provided in fluid communication with said effluent collection tank.

12. The system of claim 11 further comprising a holding tank provided in fluid communication with said first collection tank, said second collection tank and said reaction tank for receiving the first wastewater and the second wastewater from said first collection tank and said second collection tank, respectively, and distributing the first wastewater and the second wastewater to said reaction tank.

13. The system of claim 9 further comprising a third collection tank for receiving a third wastewater and wherein said reaction tank is provided in fluid communication with said third reaction tank for receiving the third wastewater.

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14. The system of claim 13 further comprising a holding tank provided in fluid communication with said first collection tank, said second collection tank and said reaction tank for receiving the first wastewater and the second wastewater from said first collection tank and said second collection tank, respectively, and distributing the first wastewater and the second wastewater to said reaction tank.

15. The system of claim 13 further comprising an effluent collection tank provided in fluid communication with said at least one clarifier for receiving wastewater effluent from said at least one clarifier, and wherein said storage tank is provided in fluid communication with said effluent collection tank.

16. The system of claim 15 further comprising a holding tank provided in fluid communication with said first collection tank, said second collection tank and said reaction tank for receiving the first wastewater and the second wastewater from said first collection tank and said second collection tank, respectively, and distributing the first wastewater and the second wastewater to said reaction tank.

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17. A process for removing particles from wastewater, comprising the steps of:

providing a first wastewater, a second wastewater and a third wastewater;

combining said first wastewater, said second wastewater and said third wastewater to form a combined wastewater;

adding a coagulant polymer to said combined wastewater to bind and precipitate said particles from said combined wastewater; and

separating said particles from said combined wastewater.

18. The process of claim 17 wherein said first wastewater comprises chemical mechanical planarization wastewater.

19. The process of claim 18 wherein said second wastewater comprises backside grind wastewater.

20. The process of claim 19 wherein said third wastewater comprises backwash wastewater.